

**What is claimed is:**

1. A method for detecting, inferring, or monitoring a disease in a human or animal, the method comprising the steps of:
  - a) extracting total extracellular RNA from plasma or serum of a human or animal;
  - b) amplifying or signal amplifying quantitatively or qualitatively a portion of the extracted RNA or cDNA therefrom to produce an amplified product or signal;
  - c) detecting quantitatively or qualitatively the amplified product or signal and comparing the amplified product or signal to a reference group or population,wherein a disease is detected, inferred or monitored when the amplified product or signal is detected.
2. The method of claim 1, wherein the disease is cancer or premalignancy.
3. The method of claim 1, wherein the amplified product is produced from a non-tumor related RNA or cDNA produced therefrom.
4. The method of claim 1, wherein the amplified product is produced from a tumor related RNA or cDNA produced therefrom.

5. A method for detecting, inferring, or monitoring disease in a human or animal, the method comprising the steps of:
  - a) extracting total RNA from a non-cellular fraction of a bodily fluid from a human or animal;
  - b) amplifying or signal amplifying quantitatively or qualitatively a portion of the extracted RNA or cDNA therefrom to produce an amplified product or signal;
  - c) detecting quantitatively or qualitatively the amplified product or signal and comparing the amplified product or signal to a reference group or population,wherein a disease is detected, inferred or monitored when the amplified product or signal is detected.
6. The method of claim 5, wherein the disease is cancer or premalignancy.
7. The method of claim 5, wherein the amplified product is produced from a non-tumor related RNA or cDNA produced therefrom.
8. The method of claim 5, wherein the amplified product is produced from a tumor related RNA or cDNA produced therefrom.
9. A method to detect, infer, or monitor a disease in a human or animal, the method comprising the steps of determining an amount or concentration or comparative value of total extracellular RNA or one or a plurality of an RNA species in a portion of plasma or serum from the human or animal, and comparing the amount or

concentration or comparative value of total extracellular RNA or one or a plurality of an RNA species to a reference range RNA amount, concentration, or value determined from a defined group or population.

10. The method of claim 9, wherein the defined group or population comprises healthy humans.
11. The method of claim 9, wherein the defined group or population comprises healthy animals.
12. The method of claim 9, wherein the defined group or population comprises humans with cancer.
13. The method of claim 9, wherein the defined group or population comprises animals with cancer.
14. The method of claim 9, wherein the defined group or population comprises humans with neoplasia.
15. The method of claim 9, wherein the defined group or population comprises animals with neoplasia.

16. The method of claim 9, wherein the defined group or population comprises humans of a specific cancer type or stage.
17. The method of claim 9, wherein the defined group or population comprises humans of a specific gender or age group.
18. The method of claim 9, wherein the defined group or population comprises humans who smoke.
19. The method of claim 9, wherein the defined group or population comprises humans with a family or genetic history of cancer or cancer risk.
20. A method to detect, infer, or monitor a disease in a human or animal, the method comprising the steps of determining an amount or concentration or comparative value of total extracellular RNA or one or a plurality of RNA species in a portion of a non-cellular fraction of a bodily fluid from the human or animal, and comparing to a reference range RNA amount, concentration, or value determined from a defined group or population.
21. The method of claim 20, wherein the defined group or population comprises healthy humans.

22. The method of claim 20, wherein the defined group or population comprises healthy animals.
23. The method of claim 20, wherein the defined group or population comprises humans with cancer.
24. The method of claim 20, wherein the defined group or population comprises animals with cancer.
25. The method of claim 20, wherein the defined group or population comprises humans with neoplasia.
26. The method of claim 20, wherein the defined group or population comprises animals with neoplasia.
27. The method of claim 20, wherein the defined group or population comprises humans of a specific cancer type or stage.
28. The method of claim 20, wherein the defined group or population comprises humans of a specific sex or age group.
29. The method of claim 20, wherein the defined group or population comprises humans who smoke.

30. The method of claim 20, wherein the defined group or population comprises humans with a family or genetic history of cancer or cancer risk.
31. A method of evaluating a human or animal for a disease comprising the step of assaying quantitatively blood plasma or serum from the human or animal to determine an amount or concentration of a housekeeping gene RNA.
32. A method of evaluating a human or animal for a disease comprising the step of assaying quantitatively non-cellular fraction of a bodily fluid from the human or animal to determine an amount or concentration of a housekeeping gene RNA.
33. A method of evaluating a human or animal for a disease comprising the step of assaying quantitatively blood plasma or serum from the human or animal to determine an amount or concentration of a non-tumor related RNA.
34. A method of evaluating a human or animal for a disease comprising the step of assaying quantitatively non-cellular fraction of a bodily fluid from the human or animal to determine an amount or concentration of a non-tumor related RNA.
35. A kit for identifying or selecting a human or animal with a disease, wherein the kit provides reagents for detecting an amount or concentration of total extracellular RNA or one or a plurality of an RNA species thereof in plasma or serum in blood

plasma or serum and a reference range of normal values of total extracellular RNA or one or a plurality of an RNA species thereof.

36. A kit for identifying or selecting a human or animal with a disease, wherein the kit provides reagents for detecting an amount or concentration of total extracellular RNA or one or a plurality of an RNA species thereof in plasma or serum in blood plasma or serum and a reference range of values from an individual, group or population with the disease of total extracellular RNA or one or a plurality of an RNA species thereof.
37. A kit according to claim 35 wherein the disease is cancer or premalignancy.
38. A kit according to claim 36 wherein the disease is cancer or premalignancy.
39. A method for comparing an amount or concentration of total extracellular RNA or one or a plurality of RNA species thereof in blood plasma or serum from a human or animal with the amount or concentration of total extracellular RNA or one or a plurality of RNA species thereon in blood plasma or serum from a reference group or population, comprising the step of comparing the amount, concentration, signal intensity, color intensity, color, mass, or electrical property of total extracellular RNA or one or a plurality of RNA species thereof.

40. A method according to claim 39, wherein the total extracellular RNA or one or a plurality of RNA species thereof from a human or animal, or a cDNA produced therefrom, is evaluated using amplification, signal amplification, hybridization, spectroscopy, or flow cytometry.
41. A method according to claim 39, wherein the total extracellular RNA or one or a plurality of RNA species thereof from a human or animal, or cDNA produced therefrom, is evaluated using gel electrophoresis, ELISA detection, fluorescent-labeled probe, radioisotope-labeled probe, chromogenically-labeled probe, Southern blot analysis, Northern blot analysis, electrochemiluminescence, reverse dot blot detection, or liquid chromatography.
42. A method for comparing an amount or concentration of total extracellular RNA or one or a plurality of RNA species thereof in a bodily fluid from a human or animal with the amount or concentration of total extracellular RNA or one or a plurality of RNA species thereon in blood plasma or serum from a reference group or population, comprising the step of comparing the amount, concentration, signal intensity, color intensity, color, mass, or electrical property of total extracellular RNA or one or a plurality of RNA species thereof.
43. A method according to claim 42, wherein the total extracellular RNA or one or a plurality of RNA species thereof from a human or animal, or cDNA therefrom, is



evaluated using amplification, signal amplification, hybridization, spectroscopy, or flow cytometry.

44. A method according to claim 42, wherein the total extracellular RNA or one or a plurality of RNA species thereof from a human or animal, or cDNA therefrom, is evaluated using gel electrophoresis, ELISA detection, fluorescent-labeled probe, radioisotope-labeled probe, chromogenically-labeled probe, Southern blot analysis, Northern blot analysis, electrochemiluminescence, reverse dot blot detection, or liquid chromatography.
45. The method of claim 9, wherein the disease is cancer or premalignancy.
46. The method of claim 20, wherein the disease is cancer or premalignancy.
47. The method of claim 31, wherein the disease is cancer or premalignancy.
48. The method of claim 32, wherein the disease is cancer or premalignancy.
49. The method of claim 33, wherein the disease is cancer or premalignancy.
50. The method of claim 34, wherein the disease is cancer or premalignancy.